

WHAT IS CLAIMED IS:

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1. An injection apparatus, comprising:
an injection frame;
a stator attached to the injection frame;
a rotor disposed radially inward of the stator
10 to be rotatable relative to the stator; and
a ball screw disposed radially inward of the
rotor,
wherein the rotor includes a hollow and
cylindrical member disposed radially outward of the ball
15 screw, and a magnet attached to an outer circumference of
the hollow and cylindrical member.

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2. An injection apparatus, comprising:
an injection frame;
a stator attached to the injection frame;
a rotor disposed radially inward of the stator
25 to be rotatable relative to the stator; and
a rotary slide member disposed radially inward
of the rotor,
wherein the rotor includes a hollow and
cylindrical member disposed radially outward of the
30 rotary slide member, and a magnet attached to an outer
circumference of the hollow and cylindrical member.

3. An injection apparatus, comprising:
an injection frame;
a cylinder member attached to the injection
frame;
5 an injection member disposed within the
cylinder member such that the injection member can
rotate and can advance and retreat;
a stator attached to the injection frame; and
a rotor disposed radially inward of the stator
10 to be rotatable relative to the stator,
wherein the rotor includes a hollow and
cylindrical member, and a magnet attached to an outer
circumference of the hollow and cylindrical member.